Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (currently amended)   A method of dynamically allocating available audio still video (ASV) buffer memory space in an ASV buffer for a current pack in a DVD audio bitstream, comprising:

(a) determining a pack type of the current pack;

(b) updating an ASV table with a pointer corresponding to an available memory location in the ASV buffer memory space, where the updating comprises:

incrementing a current pack counter;

computing a next ASV memory write address based upon the incremented pack counter; and

determining a next pack type based upon the current pack type; and

(c) concurrently with the updating, storing a current payload associated with the current pack to the available memory location.

2.   (original)   The method as recited in claim 1, further comprising:

when the current pack is not a last pack in the bitstream, then

repeating (a)-(c) for a next pack in the bitstream.

3.   (currently amended)   A The method as recited in claim 1, wherein the pack type is selected from a group comprising: a highlight pack, a subpicture pack, a video pack, and a pgm_end pack.

4.   (canceled).

5.   (currently amended)   The method as recited in claim 4 1, wherein the determining a next pack type comprises:

if the current pack type is the pgm_end pack type, then

updating an ASV counter; and

updating a highlight pack buffer counter.

6.   (currently amended)   The method as recited in claim 4 <u>1</u>, wherein the determining a next pack type comprises:

indent: if the current pack type is the highlight pack type, then

updating a subpicture buffer; and

updating a video buffer.

7.   (currently amended)   The method as recited in claim 4 <u>1</u>, wherein the determining a next pack type comprises:

if the current pack type is the subpicture pack type, then

updating a video buffer counter.

8.   (original)   The method as recited in claim 1, where in the ASV memory buffer is a SDRAM memory.

9.   (original)   The method as recited in claim 1, wherein the ASV buffer is included in a universal DVD-A/V player unit.

10.   (original)   The method as recited in claim 9, further comprising:

(v) defining an ASV frame;

(x) retrieving the ASV frame; and

(y) displaying the ASV frame on a display coupled to the DVD-A/V player unit.

11.   (currently amended)   A method ~~as recited in claim 10,~~ <u>of dynamically allocating available audio still video (ASV) buffer memory space in an ASV buffer for a current pack in a DVD audio bitstream, wherein the ASV buffer is included in a universal DVD-A/V player unit, the method comprising:</u>

<u>determining a pack type of the current pack;</u>

<u>updating an ASV table with a pointer corresponding to an available memory location in the ASV buffer memory space;</u>

<u>concurrently with the updating, storing a current payload associated with the current pack to the available memory location;</u>

<u>defining an ASV frame;</u>

<u>retrieving the ASV frame; and</u>

displaying the ASV frame on a display coupled to the DVD-A/V player unit;

wherein the defining comprises:

locating an ASV frame highlight pack, wherein the ASV frame highlight pack corresponds to a first memory space address in the ASV buffer corresponding to the ASV frame;

locating an ASV frame pgm_end pack, wherein the ASV frame pgm_end pack corresponds to a second memory space address in the ASV buffer corresponding to the ASV frame, wherein the first and the second memory space addresses define a portion of the ASV buffer memory space allocated to the ASV frame.

12.   (currently amended)   A The method as recited in claim 11, wherein the locating an ASV frame highlight pack is based upon a first highlight pack pointer stored in the ASV table.

13.   (currently amended)   A The method as recited in claim ~~12~~ 11, wherein the locating an ASV frame pgm_end pack is based upon a first pgm_end pack pointer stored in the ASV table.

14.   (original)   A method of dynamically allocating available audio still video (ASV) buffer memory space in an ASV buffer for a current pack in a DVD audio bitstream, comprising:

(a) determining a pack type of the current pack;

(b) updating an ASV table with a pointer corresponding to an available memory location in the ASV buffer memory space;

(c) concurrently with the updating, storing a current payload associated with the current pack to the available memory location;

(d) incrementing a pack counter;

(e) computing a next ASV memory write address based upon the incremented pack counter;

(f) determining a next pack type based upon the current pack type; and

(g) repeating (a)-(f) for a next pack in the bitstream when the current pack is not a last pack in the bitstream.

15.   (currently amended)   The method as recited in claim 14, wherein the pack type is selected from a group comprising: a highlight pack, a subpicture pack, a video pack, and a pgm_end pack.

16. (original) The method as recited in claim 15, wherein the determining a next pack type comprises:

if the current pack type is the pgm-end pack type, then

updating an ASV counter;

updating a highlight pack buffer counter;

if the current pack type is the highlight pack type, then

updating a subpicture buffer;

updating a video buffer; and

if the current pack type is the subpicture pack type, then

updating a video buffer counter.

17. (original) The method as recited in claim 14, where in the ASV memory buffer is a SDRAM memory.

18. (original) The method as recited in claim 14, wherein the ASV buffer is included in a universal DVD-A/V player unit.

19. (original) The method as recited in claim 18, further comprising:

defining an ASV frame;

retrieving the ASV frame; and

displaying the ASV frame on a display coupled to the DVD-A/V player unit.

20. (currently amended) A The method as recited in claim 19, wherein the defining comprises:

locating an ASV frame highlight pack, wherein the ASV frame highlight pack
corresponds to a first memory space address in the ASV buffer corresponding to the ASV
frame;

locating an ASV frame pgm~end pack, wherein the ASV frame pgm_end pack
corresponds to a second memory space address in the ASV buffer corresponding to the
ASV frame, wherein the first and the second memory space addresses define a portion of
the ASV buffer memory space allocated to the ASV frame.

21.   (currently amended)   A The method as recited in claim 20, wherein the locating an ASV frame highlight pack is based upon a first highlight pack pointer stored in the ASV table.

22.   (currently amended)   A The method as recited in claim 21, wherein the locating an ASV frame pgm_end pack is based upon a first pgm_end pack pointer stored in the ASV table.

23.   (original)   An apparatus for dynamically allocating available audio still video (ASV) buffer memory space in an ASV buffer for a current pack in a DVD audio bitstream, comprising:
    a means for determining a pack type of the current pack;
    a means for updating an ASV table with a pointer corresponding to an available memory location in the ASV buffer memory space;
    a means for concurrently with the updating, storing a current payload associated with the current pack to the available memory location;
    a means for incrementing a pack counter;
    a means for computing a next ASV memory write address based upon the incremented pack counter;
    a means for determining a next pack type based upon the current pack type.

24.   (original)   The apparatus as recited in claim 23, wherein the pack type is selected from a group comprising: a highlight pack, a subpicture pack, a video pack, and a pgm_end pack.

25.   (original)   The apparatus as recited in claim 24, further comprising:
    a means for updating an ASV counter;
    a means for updating a highlight pack buffer counter;
    a means for updating a subpicture buffer;
    a means for updating a video buffer; and
    a means for updating a video buffer counter.

26.   (original)   The apparatus as recited in claim 23, wherein the ASV buffer is included in a universal DVD-A/V player unit.

27.   (original)   The apparatus as recited in claim 26, further comprising:
    a means for defining an ASV frame;

a means for retrieving the ASV frame; and

a means for displaying the ASV frame on a display coupled to the DVD-A/V player unit.

28.   (original)   The apparatus as recited in claim 27, wherein the defining comprises:

a means for locating an ASV frame highlight pack, wherein the ASV frame highlight pack corresponds to a first memory space address in the ASV buffer corresponding to the ASV frame;

a means for locating an ASV frame pgm_end pack, wherein the ASV frame pgm_end pack corresponds to a second memory space address in the ASV buffer corresponding to the ASV frame, wherein the first and the second memory space addresses define a portion of the ASV buffer memory space allocated to the ASV frame.

29.   (currently amended)   A computer ~~program product~~ system for dynamically allocating available audio still video (ASV) buffer memory space in an ASV buffer for a current pack in a DVD audio bitstream, comprising:

a computer;

a computer program executing on the computer, wherein the computer program comprises computer instructions for:

~~computer code for~~ determining a pack type of the current pack;

~~computer code for~~ updating an ASV table with a pointer corresponding to an available memory location in the ASV buffer memory space;

~~computer code for~~ concurrently with the updating, storing a current payload associated with the current pack to the available memory location;

~~computer code for~~ incrementing a pack counter;

~~computer code for~~ computing a next ASV memory write address based upon the incremented pack counter; and

~~computer code for~~ determining a next pack type based upon the current pack type; ~~and a computer readable medium for storing the computer program product.~~

30.   (currently amended)   The computer ~~program product~~ system as recited in claim 29, wherein the pack type is selected from a group comprising: a highlight pack, a subpicture pack, a video pack, and a pgm_end pack.

31.　(currently amended)　The computer ~~program product~~ <u>system</u> as recited in claim 30, <u>wherein the computer program</u> further ~~comprising~~ <u>comprises computer instructions for</u>:

~~computer code for~~ updating an ASV counter;

~~computer code for~~ updating a highlight pack buffer counter;

~~computer code for~~ updating a subpicture buffer;

~~computer code for~~ updating a video buffer; and

~~computer code for~~ updating a video buffer counter.

32.　(currently amended)　The computer ~~program product~~ <u>system</u> as recited in claim 29, where in the ASV memory buffer is a SDRAM memory.

33.　(currently amended)　The computer ~~program product~~ <u>system</u> as recited in claim 29, wherein the ASV buffer is included in a universal DVD-A/V player unit.

34.　(currently amended)　The computer ~~program product~~ <u>system</u> as recited in claim 33, <u>wherein the computer program</u> further ~~comprising~~ <u>comprises computer instructions for</u>:

~~computer code for~~ defining an ASV frame;

~~computer code for~~ retrieving the ASV frame; and

~~computer code for~~ displaying the ASV frame on a display coupled to the DVD-A/V player unit.

35.　(currently amended)　~~A~~ <u>The</u> computer ~~program product~~ <u>system</u> as recited in claim 34, <u>wherein the computer program</u> further ~~comprising~~ <u>comprises computer instructions for</u>:

~~computer code for~~ locating an ASV frame highlight pack, wherein the ASV frame highlight pack corresponds to a first memory space address in the ASV buffer corresponding to the ASV frame; and

~~computer code for~~ locating an ASV frame pgm_end pack, wherein the ASV frame pgm_end pack corresponds to a second memory space address in the ASV buffer corresponding to the ASV frame, wherein the first and the second memory space addresses define a portion of the ASV buffer memory space allocated to the ASV frame.